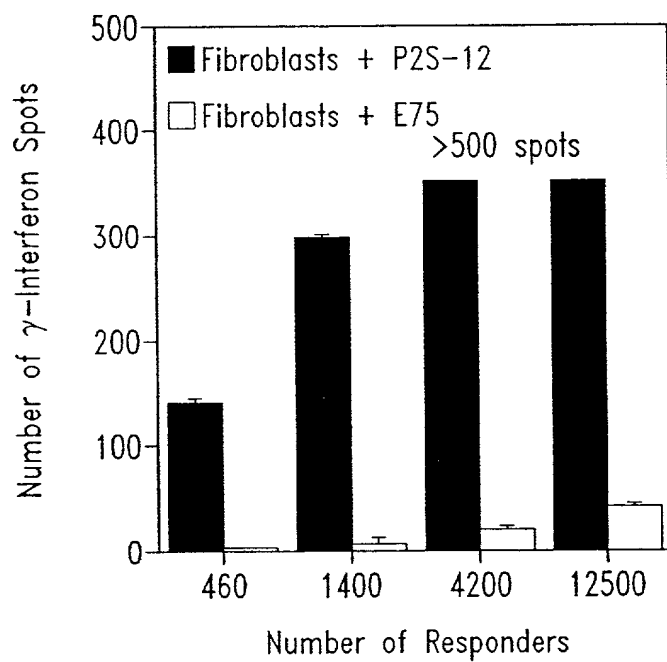
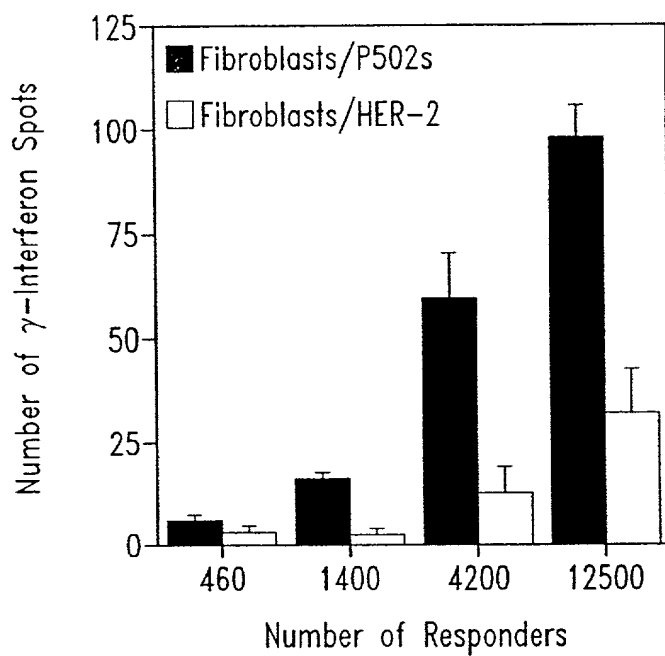


*Fig. 1*



*Fig. 2A*



*Fig. 2B*

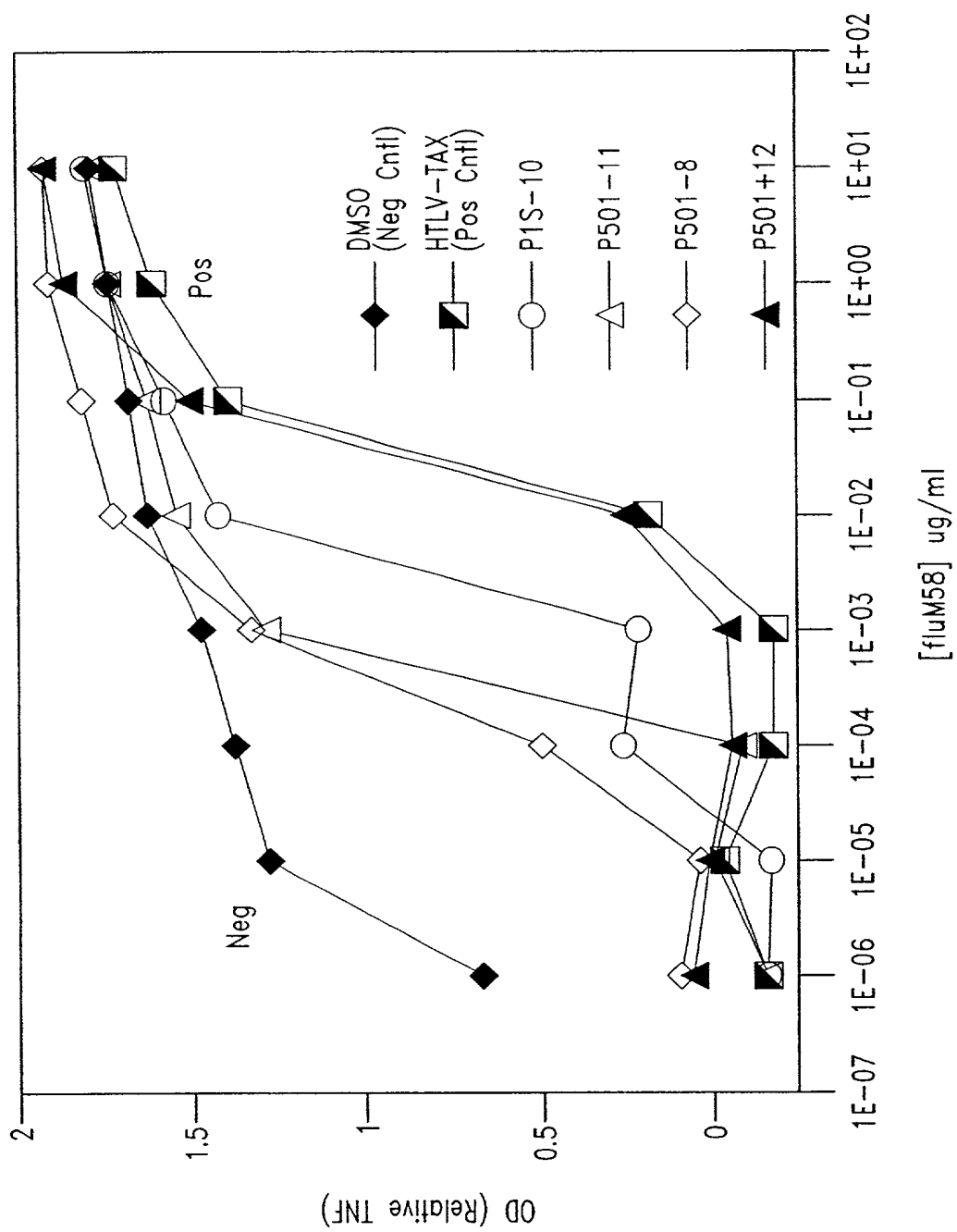
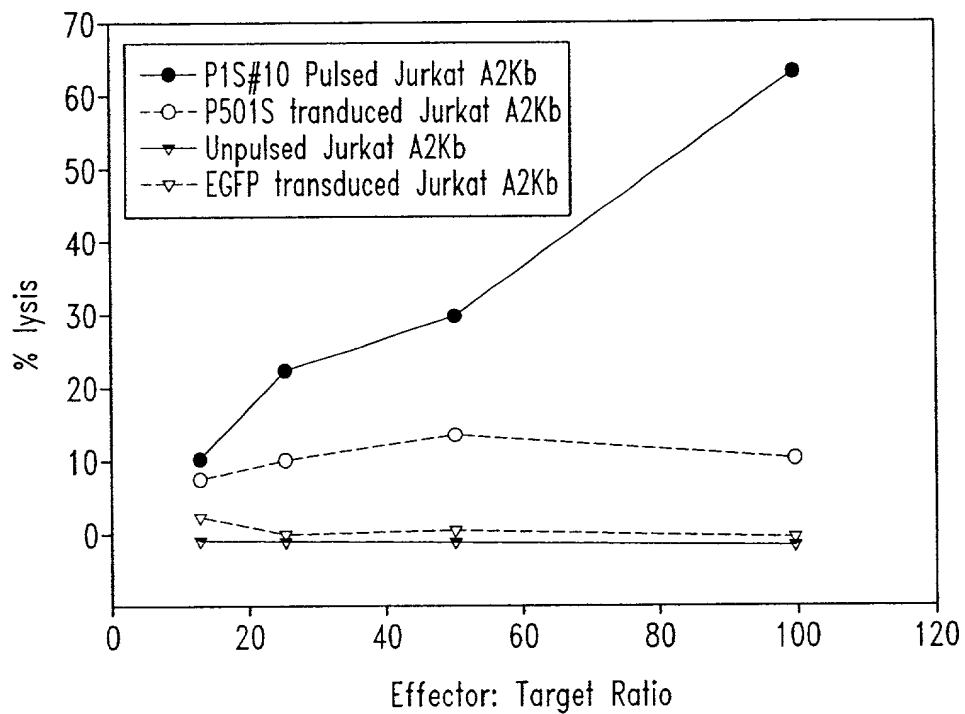
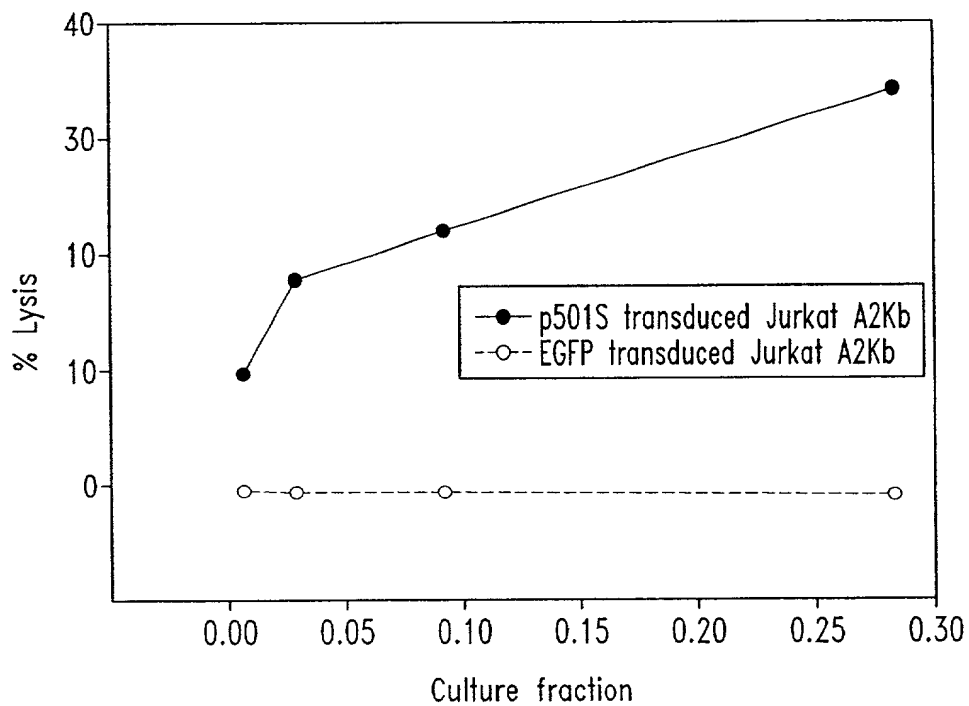


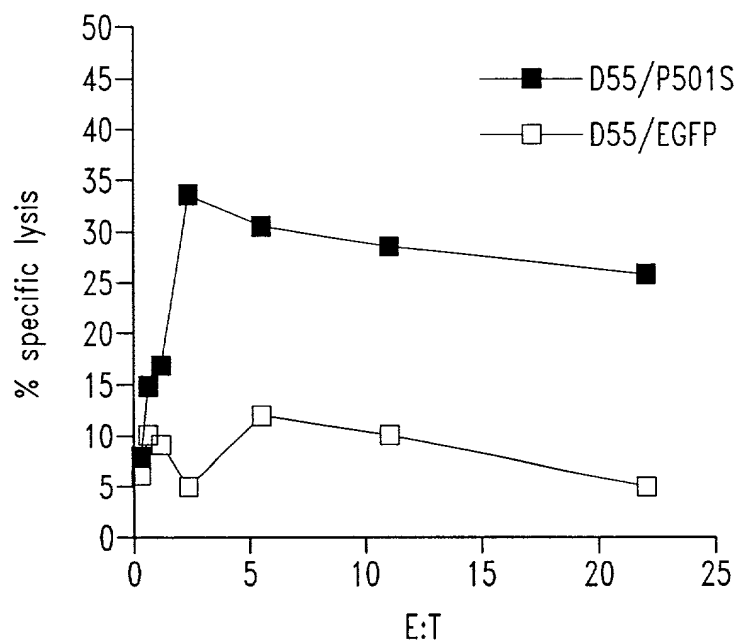
Fig. 3



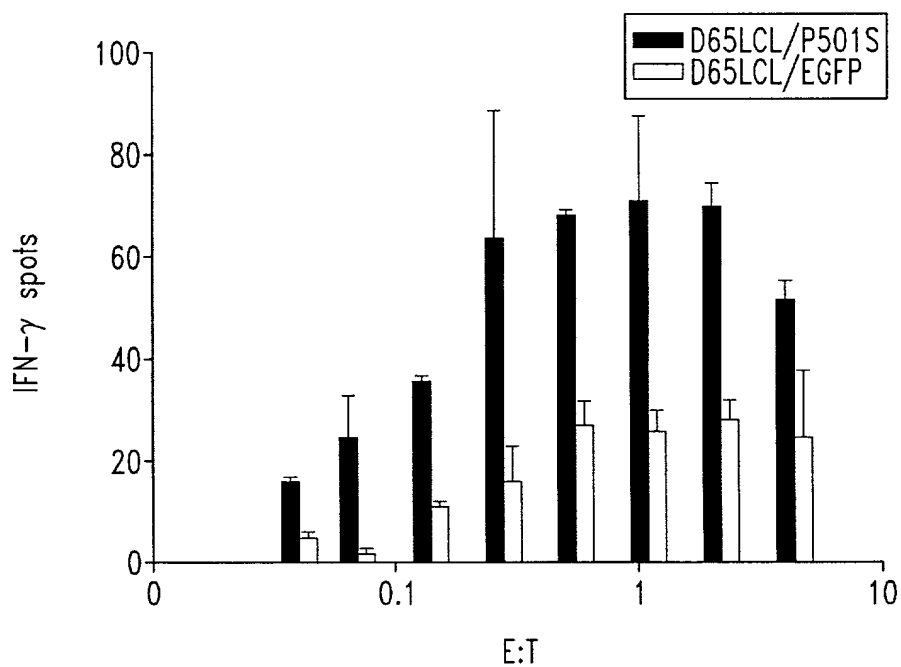
*Fig. 4*



*Fig. 5*

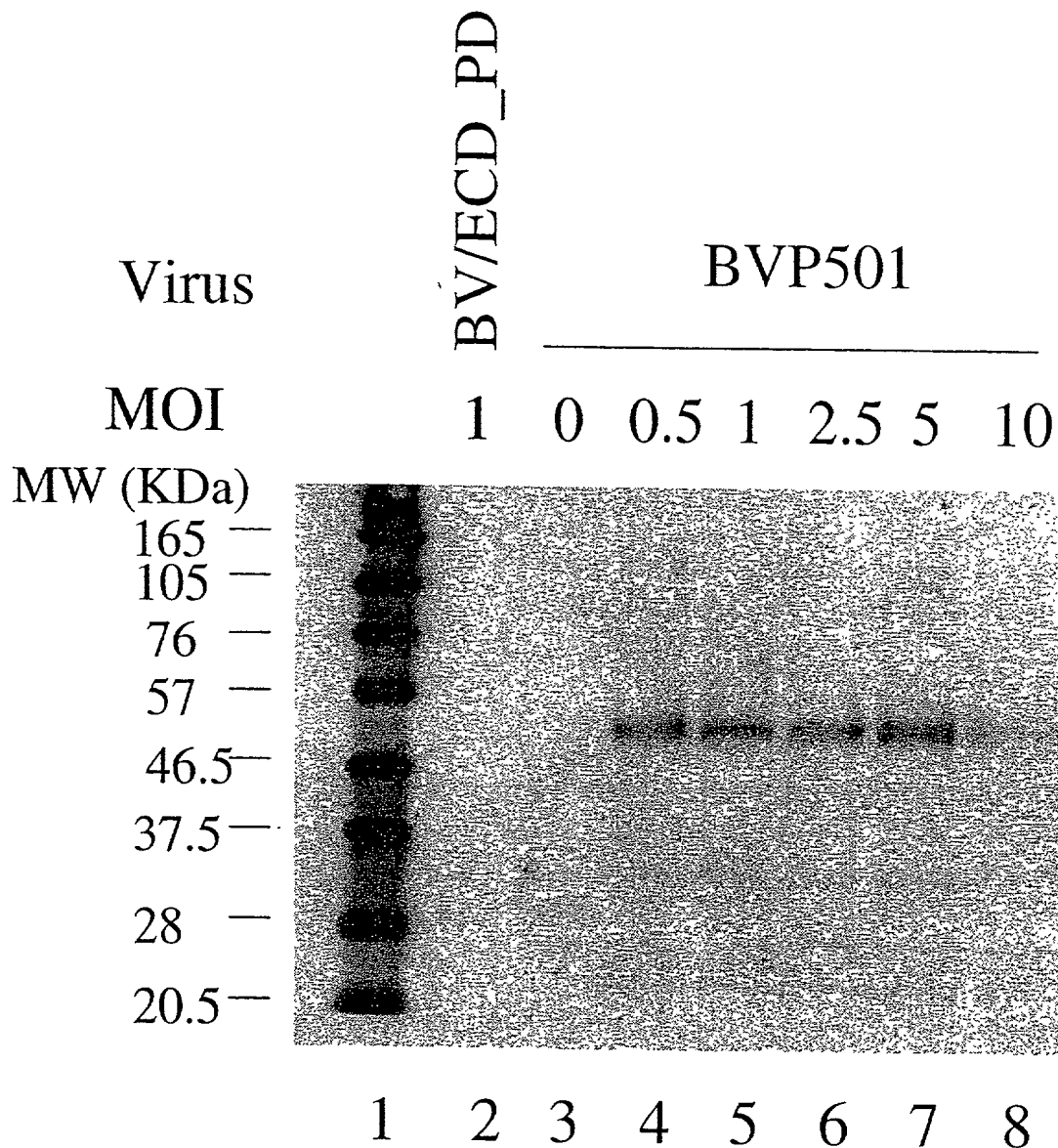


*Fig. 6A*



*Fig. 6B*

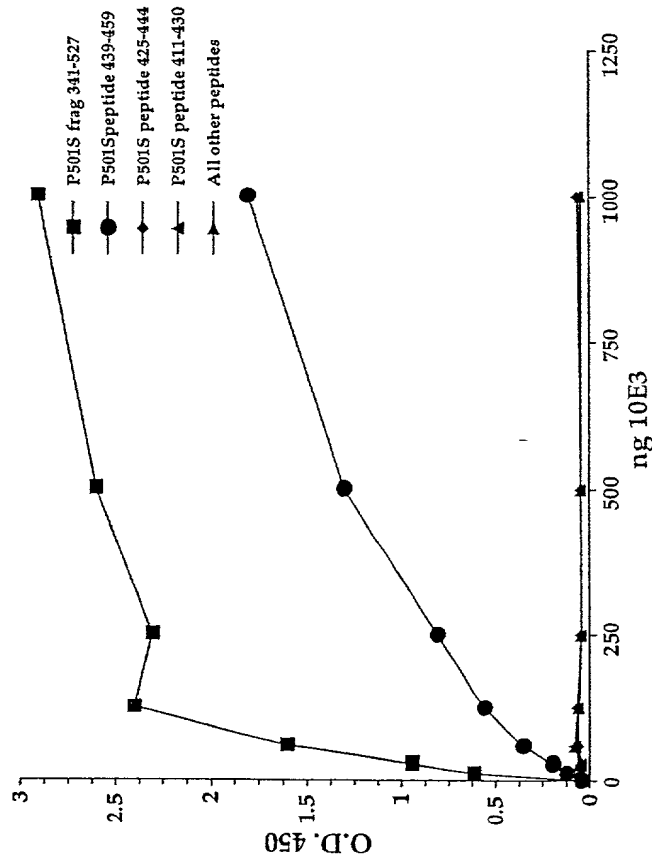
# Expression of P501S by the Baculovirus Expression System





0.6 million high 5 cells in 6-well plate were infected with an unrelated control virus BV/ECD\_PD (lane 2), without virus (lane 3), or with recombinant baculovirus for P501 at different MOIs (lane 4 – 8). Cell lysates were run on SDS-PAGE under the reducing conditions and analyzed by Western blot with a monoclonal antibody against P501S (P501S-10E3-G4D3). Lane 1 is the biotinylated protein molecular weight marker (BioLabs).

Fig. 7

# Figure 8. Mapping of the epitope recognized by 10E3-G4-D3



 : P501S sequence  
 : Transmembrane domain

Full-length P501S:



P501S fragment used for immunization:

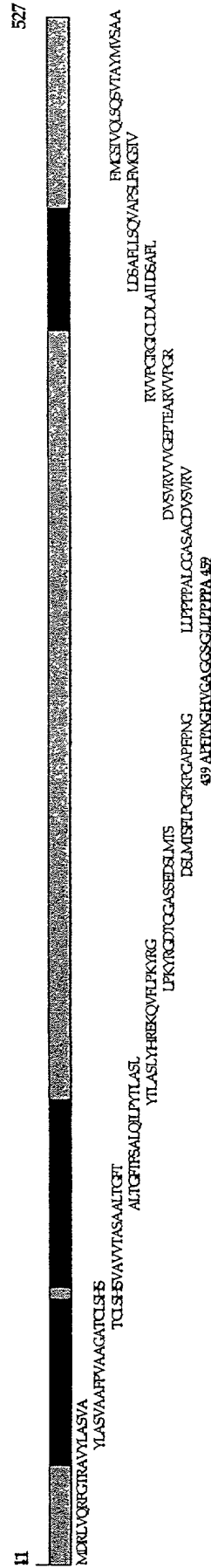


Fig. 8

7

Figure 1. Schematic of P501S with predicted transmembrane, cytoplasmic, and extracellular regions

MIVQRLWVSRLLRRK AQLILVNLTTGLEVCI AAGT VVPILLLEVCVFFICKM TRIVLGIQPYLGLCYPIILGSAS  
 DWWRGRYGRRRP EIWALSLGILLSTLEIPRAGWL AGTCTDPRPLE LALLILGVGLLDFCGQVCFPL  
 PALLSLFRDPDHCQ AYSVYAFHSLGGTGYTIPAI DWDTSATAPVLCETQHE  
 CLPGLLTLEPLTGVNATILY APLVATGPTTPVCHLAPVLSPTCTCRARLAFHNLGAILPRL  
 HQLCHRPRTIRR LPVAFCSWMANLETLFYLDF YGEGLYQGVPLRLPCTLEARRIYDEGYR  
 MGSILGLTLOCAISLYPSLYN DRIVQDECTRAVYAS VAAFPVAACTCLSHSYAVVTA SAA  
 LTGEITFSALQILPYTLASLY HREKQVFLPKYRGDTGCASVEDSIATSFIPGPKGAPFPNGIIVGAGCSGL  
 LPPPPALCCGASACDVSVRVYVCEPTEARVVPKRG ELLDLAHLPSAFLLSQYAPLEI MGSIVQLSQS  
 VTAYMVSAAGILYALYFAT QVVFQKSDLAATSA

Underlined sequence: Predicted transmembrane domain; Bold sequence: Predicted extracellular domain;  
 Italic sequence: Predicted intracellular domain. Sequence in bold/underlined, used to generate polyclonal rabbit serum

Localization of domains predicted using IMM-TOPO (C.E. Tusnady and I. Simon (1998) Principles  
 Governing Amino Acid Composition of Integral Membrane Proteins: Applications to topology Prediction. J.Mol Biol. 283,  
 489-506.

# Genomic Map of (5) Corixa Candidate Genes

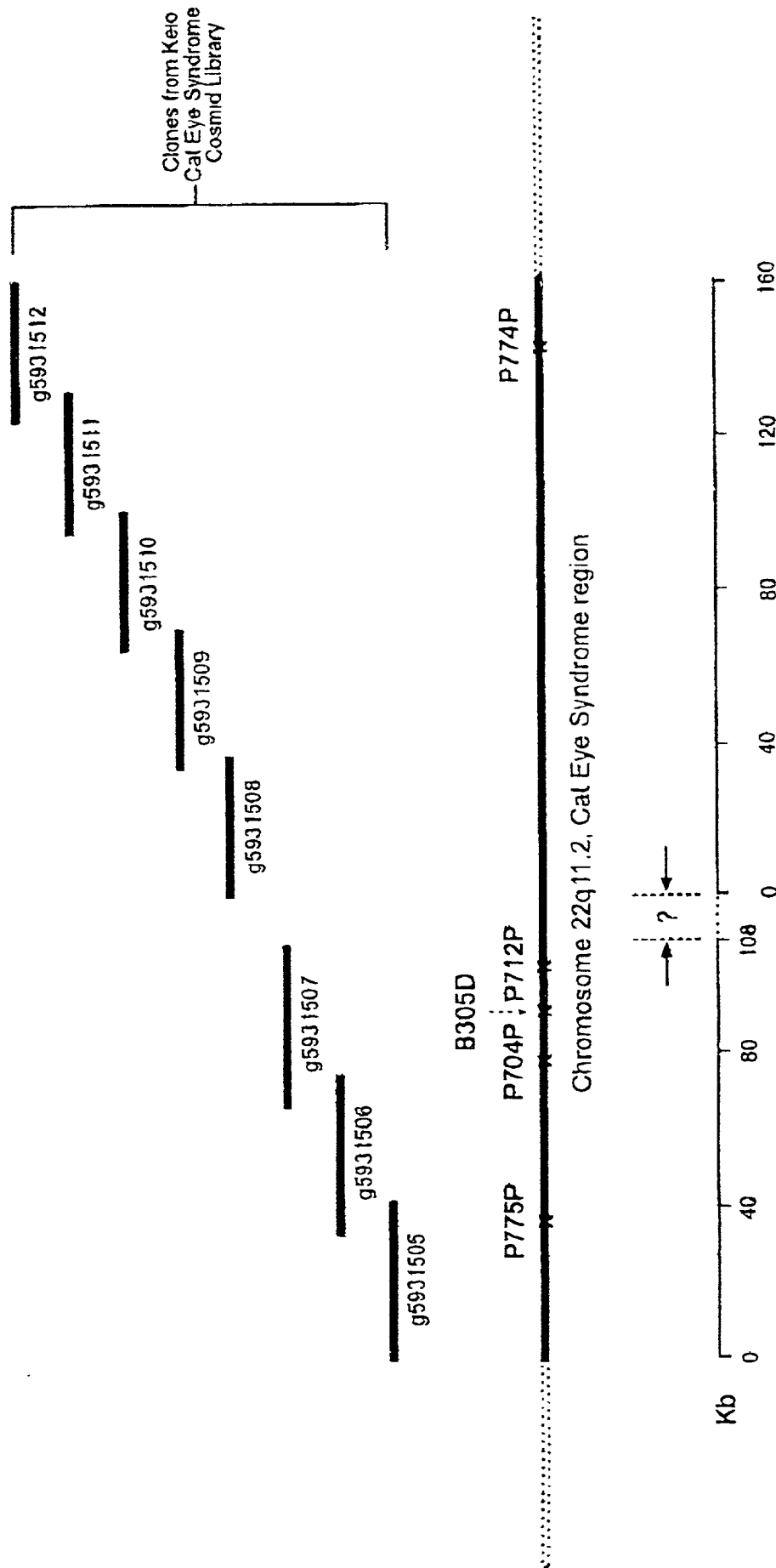


Fig. 10

FIGURE 4. Elisa assay of rabbit polyclonal antibody specificity

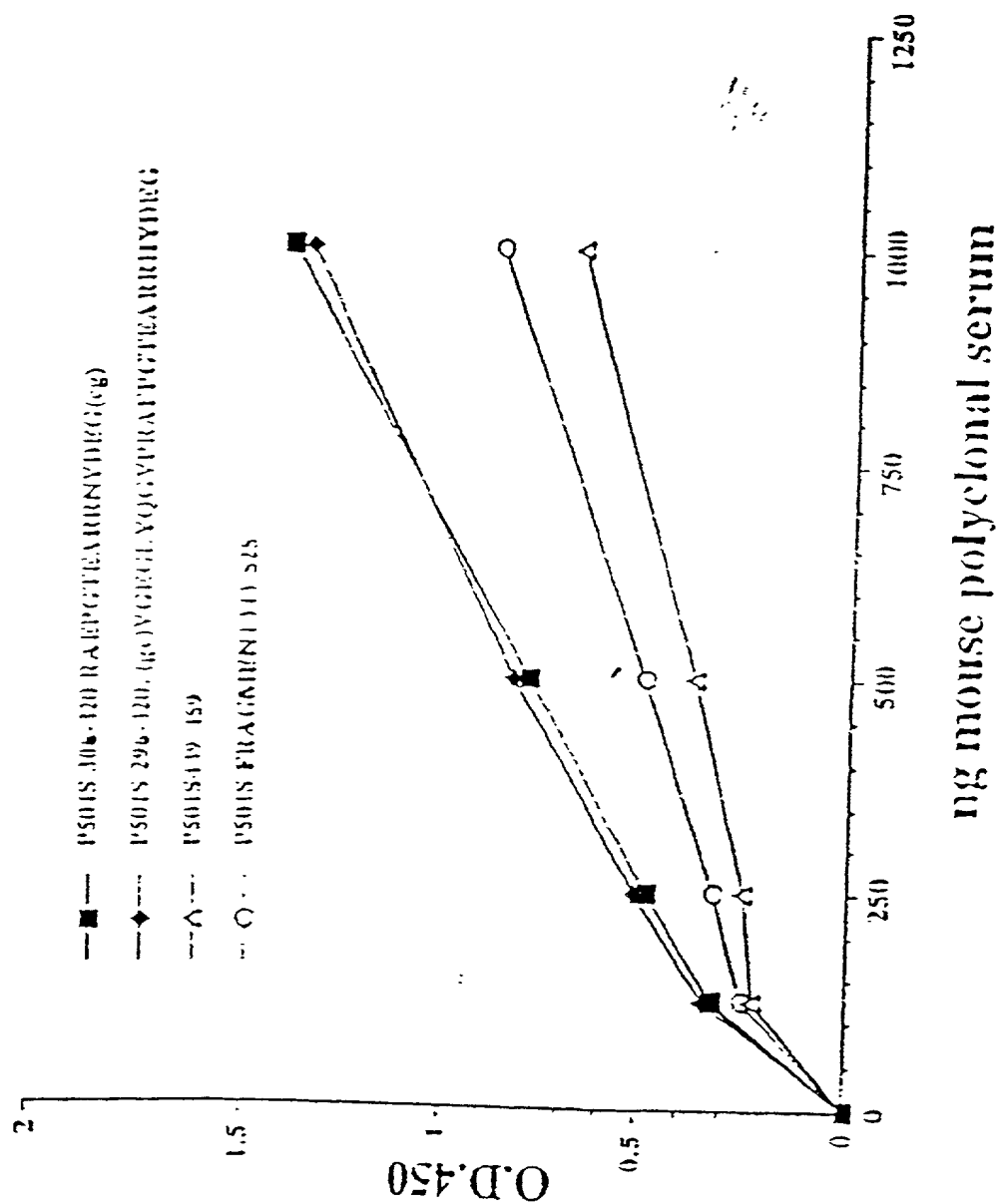


Fig. 11

10 20 30 40 50 60 70

GTCACCTAGGAAAAGGTGTCCTTTTCGGGCAGCCGGGCTCAGCATGAGGAACAGAAGGAATGACACTCTGG 70  
ACAGCACCCGGACCCCTGTACTCCAGCGCGTCTCGGAGCACAGACTTGTCTTACACTGAAAGCGACTTGGT 140  
GAATTTTATTCAAGCAAATTTTAAGAAACGAGAATGTGTCTTCTTTACCAAAGATTCCAAGGCCACGGAG 210  
AATGTGTGCAAGTGTGGCTATGCCCAGAGCCAGCACATGGAAGGCACCCAGATCAACCAAAGTGAGAAAT 280  
GGAACTACAAGAAACACACCAAGGAATTTCTTACCGAGCGCTTTGGGGATATTTCAGTTTGAGACACTGGG 350

360 370 380 390 400 410 420

GAAGAAAGGGAAGTATATACGTCTGTCTTGCAGACAGCGACGGGAAATCCTTTACGAGCTGCTGACCCAG 420  
CACTGGCACTTGAAAACAACCAACCTGGTCAATTTCTGTGACCGGGGGCGCCAAGAACTTCGCCCTGAAGC 490  
CGCGCATGCGCAAGATCTTCAAGCGGCTCATCTACATCGCGCAGTCCAAAGGTGCTTGGATTCTCAGGG 560  
AGGCACCCATTATGGCTGACGAAGTACATCGGGGAGGTGGTGAGAGATAACACCATCAGCAGGAGTTCA 630  
GAGGAGAATATTGTGGCCATTGGCATAGCAGCTTGGGGCATGGTCTTCAACCGGGACACCTTCATCAGGA 700

710 720 730 740 750 760 770

ATTGGCATGCTGAGGGCTATTTTTAGCCCAAGTACCTTATGGATGACTTCACAAGGGATCCACTGTATAT 770  
CCTGGACAACAACCAACACACATTTGGTGGTGGTGGAAATGGCTGTGATGGACATCCCACTGTGGAAGCA 840  
AAGCTCCGGGAATCAGCTAGAGAAGCATATCTGTGAGCGCACTATTCAAGATTCCAACTATGGTGGCAAGA 910  
TCCCCATTGTGTGTTTGGCCAAAGGAGGTGGAAGAGAGACTTGAAGGCCATCAATAGCTCCATCAAAAA 980  
TAAATTTCTTGTGTGGTGGTGGAAAGGCTCGGGCGGATCGCTGATGTGATCGCTAGCCTGGTGGAGGTG 1050

1060 1070 1080 1090 1100 1110 1120

GAGGATGCCCGACATCTTTCTGCGGTCAAGGAGAGAGGTGGTGGGCTTTTACCCCGCACGGTGTCTCGGG 1120  
TGTCTGAGGAGGAGACTGAGAGTGGATCAAAATGGGTCAAGAGAAATTTCTGCAATGTTCTCACCTATTAA 1190  
AGTTATTTAAATGGAAAGAGCTGGGGATGAAATTTGTAGCAATGGCATCTCTACGGTCTATACAAAGCC 1260  
TTCAGCACCAAGTGAGCAAGACAAAGGATAACTGGAATGGGC-GTTGAAGCTTGTGCTGGAGTGGAACTAG 1330  
TGGACTTAGCCCAATGATGAGATTTCACCAATGACCGCGATGGGAGTCTGCTGACCTTCAAGAGTCAAT 1400

1410 1420 1430 1440 1450 1460 1470

GTTTACGGCTCTCATAAAGGACAGACCCAAAGTTTGTCCGCTCTTTCTGGAGAATGGCTTGAACCTACGG 1470  
AAGTTTCTCACCCATGATGTCTCACTGAACTCTCTTCCAAGCACTTCAGCACGCTTGTGTACCGGAATC 1540  
TGCAGATCGCCAAGAATTCCTATAATGATGCCCTCTTCACTTTGTCTGGAAGCTGGTTGCGAAGCTTCCG 1610  
AAGAGGCTTCCGGGAAGGAAGACAGAAATGGCGGGGATGAGATGGACATAGAACTCCACGACGTGTCTCT 1680  
ATTACTCGGCACCCCTTGAAGCTCTCTTCATCTGGGCAATCTTTCAGAAAGAGAGGAATCTTCCAAG 1750

1760 1770 1780 1790 1800 1810 1820

TCATTTGGGAGCAGACACGGGGCTGCACTCTGSCAGCCCTGCGAGCCAGCAAGCTTCTGAAGACTCTGGC 1820  
CAAGTGAAGAGACACATCAATGCTGCTGGGGAGTCCGAGGAGCTGGCTAAAGATACGAGACCCCGGGCT 1890  
GTTGAGCTGTCACTGAGTGTACAGCAGCGATGAAGACTTGGCAGAACAGCTGCTGGTCTATTCTGTG 1960  
AAGCTTGGGTGGAAAGCAACTGTCTGGAGCTGGCGGTGGAGGCAAGAGACCATTTCAACGGCCCAAGC 2030  
TGGGTCCAGAAATTTCTTTCTAAGCAATGGATGGAGAGATTTCGGAGACACCAAGAACTGGAAAGATT 2100

Fig. 12A (i)





10	20	30	40	50	60	70	
MRNRNDTL	OSTRTLY	SSASRST	LSYSESD	LVNFIO	ANFXKRE	CVFFTK	DSKATENVCKCGYAQSQHME 70
GTQIN	OSEKWN	YKKHTK	EFPTDA	FGDIQF	ETLGKK	GKYIRL	SCDTDAEILYELLTOHWHLKT
GGAKNF	ALKPR	MRKIFS	RLIYIA	OSKGA	WILTGG	HYGLTK	YIGEVVRONTISRSSEENI
VSNRDT	LIRNCD	AEGYFL	AQYLM	DOFTRD	PLYL	DNHHTH	LLLVONGCHGHTVEAKLRN
IQDSNY	GGKIP	IVCFA	OGGK	ETLKA	INTS	IKNK	PCVYVEGSGRIAQVIA
							SLVEVEDAPTSSAVKEKLV 350
360	370	380	390	400	410	420	
RFLPRT	VSRLS	EEETES	WIKWL	KEILEC	SHLLT	VEKME	EAGDEIYSNAISYALYKAF
LKLLLE	WNOLD	LANDEI	FTNDR	RWES	ADLQ	EVMTAL	IKDRPKFYRLFLENGLNLR
HFSTL	VYRN	LGIAX	NSYN	OALLT	FVWKL	VANFR	RGRFRKEDRNGRDEM
LQNKKE	LSKYI	WECTR	GCTLA	ALGAS	KLLKTL	AKYKND	INAAGSEELANEYFTRAV
AEQLLV	YSCE	AWGGS	NCLE	LAYE	ATDOH	FTAQ	PSYONFLSKQWYGEISR
							DTKNWK!ILCLFIIPLYGCGF 700
710	720	730	740	750	760	770	
VSFRKK	PVCK	HKKLL	WYYVA	FFTS	PFVVF	SWVVF	YIAFLLFAYVLLMCFH
CDEV	RQWY	VNGV	NYFT	DLWN	VMDT	LGLFY	FIAGIVFRHSSNKSSLY
SRNL	GPKI	IMLOR	MLID	VFFF	FLFL	FAYWM	VAFGVARGGILRONEGR
OGTT	YDFA	HCTFT	GNES	KPLC	VELD	ENLPR	EPENITPLVCIYMLSTN
NDGV	WKFC	RYFL	QEYCS	RNLN	IPPF	IVFAY	FMYVKKCFKCCCKEKN
							MESSVCCFKNEDNETLA
							WEGVM 1050
1060	1070	1080	1090	1100	1110	1120	
KENYL	VKINT	KANDT	SEEM	RFR	FRQ	DTKL	NCLKGLKEIANKIK 1096

Fig. 12B